FILE 'USPAT' ENTERED AT 16:44:24 ON 09 MAY 1999

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*  U. S.  P A T E N T  T E X T  F I L E                *
*                                                      *
*  THE WEEKLY PATENT TEXT AND IMAGE DATA IS CURRENT    *
*  THROUGH APRIL 27, 1999.                             *
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=> e glomerulo?

E#	FILE	FREQUENCY	TERM
E1	USPAT	2	GLOMERULNEPHRITIS/BI
E2	USPAT	27	GLOMERULO/BI
E3	USPAT	0 -->	GLOMERULO?/BI
E4	USPAT	1	GLOMERULOCAPSULAR/BI
E5	USPAT	2	GLOMERULOID/BI
E6	USPAT	1	GLOMERULOIDS/BI
E7	USPAT	1	GLOMERULONE/BI
E8	USPAT	1	GLOMERULONEHRITIS/BI
E9	USPAT	1	GLOMERULONEPBRITIS/BI
E10	USPAT	1	GLOMERULONEPHBRITIS/BI
E11	USPAT	1	GLOMERULONEPHERITS/BI
E12	USPAT	1	GLOMERULONEPHFITIS/BI

=> e

E13	USPAT	4	GLOMERULONEPHITIS/BI
E14	USPAT	2	GLOMERULONEPHRAL/BI
E15	USPAT	1	GLOMERULONEPHRIS/BI
E16	USPAT	1	GLOMERULONEPHRISIS/BI
E17	USPAT	11	GLOMERULONEPHRITES/BI
E18	USPAT	8	GLOMERULONEPHRITIC/BI
E19	USPAT	10	GLOMERULONEPHRITIDES/BI
E20	USPAT	1339	GLOMERULONEPHRITIS/BI
E21	USPAT	1	GLOMERULONEPHRITISO/BI
E22	USPAT	1	GLOMERULONEPHRITITS/BI
E23	USPAT	3	GLOMERULONEPHRITUS/BI
E24	USPAT	4	GLOMERULONEPHROPATHY/BI

=> s e2 or GLOMERULONE?

```
          27 GLOMERULO/BI
        1376 GLOMERULONE?
L1      1395 GLOMERULO/BI OR GLOMERULONE?
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=> s GLOMERULNEPHRITIS or GLOMERULONE?

```
           2 GLOMERULNEPHRITIS
        1376 GLOMERULONE?
L2      1377 GLOMERULNEPHRITIS OR GLOMERULONE?
```

=> s chronic renal

```
       20307 CHRONIC
       10812 RENAL
L3       664 CHRONIC RENAL
               (CHRONIC(W)RENAL)
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=> s l2 or le

```
        8216 LE
L4      9541 L2 OR LE
```

=> s l2 or l3

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L5      1957 L2 OR L3
```

=> s bmp# or (((bone morphogen?)or osteogenic)(w)(protein# or polypeptide#))

```
         796 BMP#
       34654 BONE
        1149 MORPHOGEN?
         561 BONE MORPHOGEN?
               (BONE(W)MORPHOGEN?)
         782 OSTEOGENIC
       84826 PROTEIN#
       21611 POLYPEPTIDE#
         563 ((BONE MORPHOGEN?)OR OSTEOGENIC)(W)(PROTEIN# OR POLYPEPTIDE
#)
L6       995 BMP# OR (((BONE MORPHOGEN?)OR OSTEOGENIC)(W)(PROTEIN# OR PO
LYP
             EPTIDE#))
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=> s l5 and l6

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L7         13 L5 AND L6
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=> s l7 and pd>19980101

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      215069 PD>19980101
               (PD>19980101)
L8         6 L7 AND PD>19980101
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=> d bib ab 1-6

US PAT NO: 5,866,693 [IMAGE AVAILABLE] L8: 1 of 6
DATE ISSUED: **Feb. 2, 1999**
TITLE: DNA encoding human MAD proteins
INVENTOR: Nicholas J. Laping, West Chester, PA
ASSIGNEE: SmithKline Beecham Corporation, Philadelphia, PA (U.S. corp.)
APPL-NO: 08/732,028
DATE FILED: Oct. 16, 1996
ART-UNIT: 162
PRIM-EXMR: Sheela Huff
ASST-EXMR: Julie E. Reeves
LEGAL-REP: William T. King, William T. Han

US PAT NO: 5,866,693 [IMAGE AVAILABLE] L8: 1 of 6

ABSTRACT:
Human MADr3 or MADr4 polypeptides and DNA (RNA) encoding such MADr3 or MADr4 and a procedure for producing such polypeptides by recombinant techniques is disclosed. Also disclosed are methods for utilizing such MADr3 or MADr4, or compounds which inhibit or stimulate MADr3 or MADr4 for stimulating wound healing, and treating cancers, among others, are also disclosed. Agonist and antagonists of these MAD proteins and methods of their use are also disclosed. Also disclosed are diagnostic assays for detecting diseases related to mutations in the nucleic acid sequences and altered concentrations of the polypeptides. Also disclosed are diagnostic assays for detecting mutations in the polynucleotides encoding the MADr3 or MADr4 and for detecting altered levels of the polypeptide in a host.

US PAT NO: 5,834,240 [IMAGE AVAILABLE] L8: 2 of 6
DATE ISSUED: **Nov. 10, 1998**
TITLE: DNA encoding a transforming growth factor-.beta. receptor associated protein
INVENTOR: Olga Bandman, Mountain View, CA
Preeti Lal, Sunnyvale, CA
ASSIGNEE: Incyte Pharmaceuticals, Inc., Palo Alto, CA (U.S. corp.)
APPL-NO: 08/828,922
DATE FILED: Mar. 28, 1997
ART-UNIT: 166
PRIM-EXMR: Stephen Walsh
ASST-EXMR: Daryl A. Bashan
LEGAL-REP: Sheela-Mohan Peterson, Lucy J.Incyte Pharmaceuticals, Inc. Billings

US PAT NO: 5,834,240 [IMAGE AVAILABLE] L8: 2 of 6

ABSTRACT:
The present invention provides a transforming growth factor-.beta. receptor associated protein (TGFAS) and polynucleotides which identify and encode TGFAS. The invention also provides expression vectors, host cells, agonists, antibodies, and antagonists. The invention also provides methods for treating disorders associated with expression of TGFAS.

US PAT NO: 5,830,671 [IMAGE AVAILABLE] L8: 3 of 6
DATE ISSUED: **Nov. 3, 1998**
TITLE: Method for assaying for modulators of cytokines of the TFG .beta. superfamily
INVENTOR: James W. Dennis, Etobicoke, Canada
Michael Demetriou, Toronto, Canada
ASSIGNEE: Mount Sinai Hospital Corporation, Toronto, Canada (foreign corp.)
APPL-NO: 08/854,768
DATE FILED: May 12, 1997
ART-UNIT: 182
PRIM-EXMR: John Ulm
ASST-EXMR: Prema Mertz
LEGAL-REP: Merchant, Gould, Smith, Edell, Welter & Schmidt

US PAT NO: 5,830,671 [IMAGE AVAILABLE] L8: 3 of 6

ABSTRACT:
The invention relates to a method for assaying for the presence of a substance that modulates a cytokine of the TGF.beta. superfamily. A substance which is suspected of modulating a cytokine of the TGF.beta. superfamily and a TGF.beta. binding compound which is not a TGF.beta. receptor and which contains a TRH1 domain, or a portion or mimetic thereof, is reacted with a cytokine of the TGF.beta. superfamily under conditions where the compound, portion or mimetic thereof, and the cytokine are capable of forming a complex. Complexes, free compound and/or cytokine are assayed and compared with a control. The invention also relates to a composition comprising at least one compound which is not a TGF.beta. receptor and which contains the TRH1 domain or a portion, or a mimetic thereof, and a pharmaceutically acceptable carrier, auxiliary or excipient and to methods of treatment using the composition. Further the invention relates to a method of enhancing the activity of growth factors.

US PAT NO: 5,821,227 [IMAGE AVAILABLE] L8: 4 of 6
DATE ISSUED: **Oct. 13, 1998**
TITLE: Modulators of cytokines of the tgf .beta. superfamily
INVENTOR: James W. Dennis, Etobicoke, Canada
Michael Demetriou, Toronto, Canada
ASSIGNEE: Mount Sinai Hospital Corporation, Toronto, Canada (foreign corp.)
APPL-NO: 08/483,926
DATE FILED: Jun. 7, 1995
ART-UNIT: 182
PRIM-EXMR: John Ulm
ASST-EXMR: Perma Mertz
LEGAL-REP: Merchant, Gould, Smith, Edell, Welter & Schmidt

US PAT NO: 5,821,227 [IMAGE AVAILABLE] L8: 4 of 6

ABSTRACT:
The invention relates to a method for assaying for the presence of a substance that modulates a cytokine of the TGF.beta. superfamily. A substance which is suspected of modulating a cytokine of the TGF.beta. superfamily and a TGF.beta. binding compound which is not a TGF.beta. receptor and which contains a TRH1 domain, or a portion or mimetic thereof, is reacted with a cytokine of the TGF.beta. superfamily under conditions where the compound, portion or mimetic thereof, and the cytokine are capable of forming a complex. Complexes, free compound and/or cytokine are assayed and compared with a control. The invention also relates to a composition comprising at least one compound which is not a TGF.beta. receptor and which contains the TRH1 domain or a portion, or a mimetic thereof, and a pharmaceutically acceptable carrier, auxiliary or excipient and to methods of treatment using the composition. Further the invention relates to a method of enhancing the activity of growth factors.

US PAT NO: 5,807,981 [IMAGE AVAILABLE] L8: 5 of 6
DATE ISSUED: **Sep. 15, 1998**
TITLE: Peptides which are cleaved by C-proteinase
INVENTOR: Mitch Brenner, Moutain View, CA
ASSIGNEE: FibroGen, Inc., South San Francisco, CA (U.S. corp.)
APPL-NO: 08/572,225
DATE FILED: Dec. 13, 1995
ART-UNIT: 162
PRIM-EXMR: Eric Grimes
ASST-EXMR: Elizabeth Slobodyansky
LEGAL-REP: Pennie & Edmonds LLP

US PAT NO: 5,807,981 [IMAGE AVAILABLE] L8: 5 of 6

ABSTRACT:
The present invention is directed to the isolation and identification of the nucleic acid sequence encoding C-proteinase, the recognition of such protein's activity and applications, and tools, processes, and methods of use thereof. The invention is further directed to the identification of molecules modulating C-proteinase's activity, and methods, processes and tools therefor. In a more specific aspect, the invention is directed to peptides resembling the C-proteinase recognition site of procollagen. Such peptides may be employed as modulators of C-proteinase activity, by, for example, acting as competitive inhibitor, and may be employed for the treatment of disorders which involve unregulated production of collagen. Furthermore, such peptides may be employed as C-proteinase substrates for screening of molecules to identify compounds which modulate C-proteinase's activity.

US PAT NO: 5,731,200 [IMAGE AVAILABLE] L8: 6 of 6
DATE ISSUED: **Mar. 24, 1998**
TITLE: Isolated nucleic acid encoding receptor-like TGF-.beta.1 binding protein
INVENTOR: Hidenori Ichijo, Uppsala, Sweden
Kohei Miyazono, Uppsala, Sweden
Lars Ronnstrand, Uppsala, Sweden
Ulf Hellman, Uppsala, Sweden
Christer Wernstedt, Uppsala, Sweden
Carl-Henrik Heldin, Uppsala, Sweden
ASSIGNEE: Ludwig Institute for Cancer Research, New York, NY (U.S. corp.)
APPL-NO: 08/567,538
DATE FILED: Dec. 5, 1995
ART-UNIT: 182
PRIM-EXMR: David L. Fitzgerald
ASST-EXMR: Mukul Ranjan
LEGAL-REP: Felfe & Lynch

US PAT NO: 5,731,200 [IMAGE AVAILABLE] L8: 6 of 6

ABSTRACT:
The invention relates to a family of substantially pure, receptor like TGF-.beta.1 binding glycoproteins. These molecules are characterized by molecular masses of 160 kd, 70-80 kd, and 30-40 kd as determined by SDS-PAGE, and the ability to bind the TGF-.beta.1 molecule. This family of molecules is useful in identifying and/or quantifying TGF-.beta.1 in a sample, as well as inhibiting its effect on cells. Also described are nucleic acid sequences which code for the protein monomer making up the molecules.

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     (FILE 'USPAT' ENTERED AT 16:44:24 ON 09 MAY 1999)
           E GLOMERULO?
L1      1395 S E2 OR GLOMERULONE?
L2      1377 S GLOMERULNEPHRITIS OR GLOMERULONE?
```

```
L3          664 S CHRONIC RENAL
L4         9541 S L2 OR LE
L5         1957 S L2 OR L3
L6          995 S BMP# OR (((BONE MORPHOGEN?)OR OSTEOGENIC)(W)(PROTEIN# OR
 PO
L7           13 S L5 AND L6
L8            6 S L7 AND PD>19980101

=> select

ENTER ANSWER SET L#, TERMSET L# or (L8):18

ENTER ANSWER NUMBER OR RANGE (1-):1-

ENTER DISPLAY FORMAT (TI) OR ?:pn

E1 THROUGH E6 ASSIGNED

=> s e1-e6

                1 "5,731,200"/PN
                  (5731200/PN)
                1 "5,807,981"/PN
                  (5807981/PN)
                1 "5,821,227"/PN
                  (5821227/PN)
                1 "5,830,671"/PN
                  (5830671/PN)
                1 "5,834,240"/PN
                  (5834240/PN)
                1 "5,866,693"/PN
                  (5866693/PN)
L9              6 ("5,731,200"/PN OR "5,807,981"/PN OR "5,821,227"/PN OR "5,8
30,
                  671"/PN OR "5,834,240"/PN OR "5,866,693"/PN)

=> s l9 and l5

L10             6 L9 AND L5

=> d kwic 1-

US PAT NO:      **5,866,693** [IMAGE AVAILABLE]          L10: 1 of 6

SUMMARY:

BSUM(8)

 Therefore, . . . or BMP signaling are indicated [see, e.g., Eppert et
al, Cell, 86:543-552 (Aug. 23, 1996)]. Such disorders include, without
limitation, **chronic** **renal** failure, scarring, colorectal
carcinoma, and cardiovascular disease.

SUMMARY:

BSUM(29)

 In . . . of other downstream proteins, and interaction with cis
elements. Antagonists of MADr3 activity can be used in the treatment of
**chronic** **renal** failure, acute renal failure, wound healing and
prevention of scar formation, arthritis, osteoporosis, atherosclerosis,
polycystic kidney disease and congestive heart. . .
US PAT NO:      **5,834,240** [IMAGE AVAILABLE]          L10: 2 of 6

DETDESC:

DETD(88)

 In . . . decreased TGFAS expression including, but not limited to,
sepis, toxic shock, autoimmune thyroiditis, polymyositis, lupus
erythematosis, osteoporosis, ulcerative colitis, asthma,
**glomerulonephritis**, osteoarthritis, vitreoretinopathy, wound healing.
US PAT NO:      **5,830,671** [IMAGE AVAILABLE]          L10: 3 of 6

SUMMARY:

BSUM(20)

 A . . . al., Nature 346:281, 1990). Decorin has also been found to
antagonize the action of TGF.beta. in vivo using an experimental
**glomerulonephritis** model (Border et al., Nature 360:361, 1992).

DETDESC:

DETD(46)

 The . . . The well-characterized pig model of radiation induced
fibrosis described in Martin et al, Radiation Research 134(1)63, 1993,
and the experimental **glomerulonephritis** model described in Border et
al, Nature 360:361, 1992 may also be utilised. Other models which may be
useful in. . .
US PAT NO:      **5,821,227** [IMAGE AVAILABLE]          L10: 4 of 6

SUMMARY:

BSUM(20)

 A . . . al., Nature 346:281, 1990). Decorin has also been found to
antagonize the action of TGF.beta. in vivo using an experimental
**glomerulonephritis** model (Border et al., Nature 360:361, 1992).

DETDESC:

DETD(46)

 The . . . The well-characterized pig model of radiation induced
fibrosis described in Martin et al, Radiation Research 134(1)63, 1993,
and the experimental **glomerulonephritis** model described in Border et
al, Nature 360:361, 1992 may also be utilised. Other models which may be
useful in. . .
US PAT NO:      **5,807,981** [IMAGE AVAILABLE]          L10: 5 of 6

SUMMARY:

BSUM(23)

 An . . . fibrosis, pericentral fibrosis, hepatitis, dermatofibroma,
billary cirrhosis, alcoholic cirrhosis, acute pulmonary fibrosis,
idiopathic pulmonary fibrosis, acute respiratory distress syndrome,
kidney fibrosis/**glomerulonephritis**, kidney fibrosis/diabetic
nephropathy, scleroderma/systemic, scleroderma/local, keloids,
hypertrophic scars, severe joint adhesions/arthritis, myelofibrosis,
comeal scarring, cystic fibrosis, muscular dystrophy (duchenne's),
cardiac. . .
US PAT NO:      **5,731,200** [IMAGE AVAILABLE]          L10: 6 of 6

SUMMARY:

BSUM(5)

 Originally . . . The molecules have a dramatic effect on accumulation
of extracellular matrix proteins (Massague, supra), and have been
implicated in pathogenic **glomerulonephritis** (Border et al., Nature
346: 371-374 (1990)]; liver cirrhosis (Castilla et al., N. Eng. J. Med.
324: 933-940 (1990)); and. . .

=> d bsum(8)


US PAT NO:      **5,866,693** [IMAGE AVAILABLE]          L10: 1 of 6

SUMMARY:

BSUM(8)

 Therefore, selective antagonists of the MAD isoforms are anticipated to
be beneficial in many diseases where selective interruption of TGF-.beta.
or BMP signaling are indicated [see, e.g., Eppert et al, Cell, 86:543-552
(Aug. 23, 1996)]. Such disorders include, without limitation, **chronic**
**renal** failure, scarring, colorectal carcinoma, and cardiovascular
disease.

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     (FILE 'USPAT' ENTERED AT 16:44:24 ON 09 MAY 1999)
                E GLOMERULO?
L1          1395 S E2 OR GLOMERULONE?
L2          1377 S GLOMERULNEPHRITIS OR GLOMERULONE?
L3           664 S CHRONIC RENAL
L4          9541 S L2 OR LE
L5          1957 S L2 OR L3
L6           995 S BMP# OR (((BONE MORPHOGEN?)OR OSTEOGENIC)(W)(PROTEIN# OR
 PO
L7            13 S L5 AND L6
L8             6 S L7 AND PD>19980101
                SELECT   L8 1- PN
L9             6 S E1-E6
L10            6 S L9 AND L5


U.S. Patent & Trademark Office LOGOFF AT 16:53:51 ON 09 MAY 1999


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